

## **WE CLAIM**

1. A method for enhancing delivery of oxygen to tissue, comprising applying to said tissue a composition which contains a vasodilating effective amount of a derivative of a vasodilator compound, wherein said derivative has a log P value below about 6.0.
2. The method of claim 1, wherein said derivative has a log P value of from about 4.5 to about 5.5.
3. The method of claim 1, wherein said derivative is an ester.
4. The method of claim 1, wherein said derivative is an alcohol ester.
5. The method of claim 3, wherein said ester contains from about 1 to about 12 carbon atoms in an alkyl chain.
6. The method of claim 5, wherein said alkyl chain contains from about 6 to about 12 carbon atoms.
7. The method of claim 6, wherein said alkyl chain contains from about 8 to about 10 carbon atoms.
8. The method of claim 7, wherein said derivative is a niacin octyl ester.
9. The method of claim 4, wherein said ester contains from about 6 to about 12 carbon atoms in an alkyl chain.
10. The method of claim 9, wherein said ester contains from about 8 to about 10 carbon atoms in an alkyl chain.
11. The method of claim 4, wherein said derivative is a niacin alcohol ester.
12. The method of claim 1, wherein said derivative is present in an amount ranging from about 0.05% to about 5.0% by weight of said composition.
13. The method of claim 12, wherein said derivative is present in an amount ranging from about 0.1% to about 1.0% by weight of said composition.
14. The method of claim 1, wherein said composition is in the form of a cream, a lotion, a salve, a balm, a roll-on stick, a shampoo, a wash, or a suppository.
15. The method of claim 1, wherein said composition comprises an ester of a compound without vasodilatory effect.
16. The method of claim 1, wherein said ester is butyl benzoate.